

**Amendments to the Specification:**

Please delete paragraph 2 (lines 4-5) on page 9.

Please replace the paragraph at page 12, line 21-24 with the following rewritten paragraph:

Figs. 21A and 21B are graphs showing current-optical output characteristics and oscillation spectrums of a laser element portion for the wavelength ~~750~~ 650 nm in the semiconductor laser array according to the invention;

Please replace the paragraph beginning at page 21, line 34 and ending at page 22 line 3 with the following rewritten paragraph:

The first laser element portion 240 includes a first cladding layer 212, an active layer 214 formed by epitaxially growing a first semiconductor material on said first cladding layer 212, a second cladding layer 216 and a third cladding layer 218 formed on the active layer 214 and a current-blocking layer 231 to confine an electrical current injected into the first laser element portion 240.

Please replace the paragraph at page 22, lines 4-10 with the following rewritten paragraph:

The second laser element portion 241 includes a first cladding layer 222, an active layer 224 formed by epitaxially growing a second semiconductor material on the first cladding layer 222, a second cladding layer 226 and a third cladding layer 228 formed on the active layer 224 and a current-blocking layer 231 to confine an electrical current injected into the second laser element portion 241.

Appl. No. 10/664,002  
Amdt. Dated November 3, 2005  
Reply to Office Action of June 3, 2005

Attorney Docket No. 89301.0002 (81788.0257)  
Customer No.: 26021

Please replace the paragraph at page 22, lines 14-18 with the following rewritten paragraph:

The first, second and third ~~and second~~ cladding layers 212, 216, 218, 222, 226 and 228 of the first and second laser element portions may be made of AlGaAs, and the current-blocking layers 231, 231 of the first and second laser element portions 240 and 241 may be made of GaAs.

Please replace the paragraph at page 22, lines 19-25 with the following rewritten paragraph:

The group-V species included in the second and third cladding layer ~~layers~~ 216 and 218 of said first laser element portion 240 may not be identical to group-V species included in the current-blocking layer 231, and group-V species included in the second and third cladding layer ~~layers~~ 226 and 228 of the second laser element portion 241 may not be identical to group-V species included in the current-blocking layer 231.

Please replace the paragraph at page 22, lines 26-29 with the following rewritten paragraph:

The first, second and third ~~and second~~ cladding layers 212, 216 and 218 of said first laser element portion 240 and ~~said the first, second and third and second~~ cladding layers 222, 226 and 228 of said second laser element portion 241 may be made of same semiconductor material.

Please replace the paragraph at page 22, lines 30-32 with the following rewritten paragraph:

The first, second and third ~~and second~~ cladding layers 212, 216, 218, 222, 226 and 228 of said first and second laser element portions may be made of InGaAlP or InAlP.

Please replace the paragraph at page 22, lines 33-36 with the following rewritten paragraph:

The ~~second~~ third cladding layer 228 of the second laser element portion 241 may be configured as a ridge stripe extending along laser cavity lengthwise directions and both sides of the ridge stripe is buried by the current-blocking layer 231.

Please replace the paragraph at page 23, lines 13-15 with the following rewritten paragraph:

The second and third cladding ~~layer~~ layers 216 and ~~28~~ 218 of the first laser element portion may have a p-type conduction type and its p-type carrier density is preferably not larger than  $8 \times 10^{17} \text{cm}^{-3}$ .

Please replace the paragraph at page 34, lines 24-35 with the following rewritten paragraph:

Fig. 24D is a cross-sectional view showing construction of another 2-beam semiconductor laser array for oscillation wavelengths according to the invention. In this laser array, the cladding layers 212, 216, 218, 222, 226 and 228 ~~222 and 226~~ may be formed of InGaAlP. The p-InGaP etching stop layers 217 and 227 are interposed ~~in~~ between the cladding layers 216 and 218 and between the cladding

layers ~~216~~ 226 and ~~226~~ 228. ~~The upper portions of the cladding layers 216 and 226~~  
The third cladding layers 218 and 228 are formed to be stripe-shaped ridge waveguides. On the top of the ridge, the intermediate layer 260 is formed. The top layer 261 may be formed of p-GaAs. The layer 260 is formed of a semiconductor material having an intermediate bandgap between cladding layer 216 (226) and the top layer 261. N-InGaP may be used for the layer 260.

Please replace the paragraph beginning at page 34, line 36 and ending at page 35 line 8 with the following rewritten paragraph:

Since the interface between the p-InGaAlP cladding layer ~~216 (226)~~ 218 (228) and n-GaAs top layer ~~260~~ 261 has a large hetero-barrier spike, the electrical current is blocked. In this sense, the top layer ~~260~~ 261 can function as the current-blocking layer at the both sides of the ridge. In contrast to this, on the stripe-shaped cladding layer ~~216 and 226~~ 218 and 228, the intermediate layer 260 makes the hetero-barrier spike much lower. As a result, the electrical current is effectively concentrated into the stripe-shaped region. The laser array shown in Fig. 24D also have the same feature and advantages as the laser array show in Fig. 9.